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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,398

09/29/2005

John P.R. Hammerbeck

AP067-05

3278

29689

7590

05/21/2008

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EXAMINER

ESTREMSKY, SHERRY LYNN

ART UNIT

PAPER NUMBER

3681

MAIL DATE

DELIVERY MODE

05/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,398	Applicant(s) HAMMERBECK, JOHN P.R.	
	Examiner Sherry L. Estremsky	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3- 5, 7, 20, 22, and 24-26 is/are rejected.
- 7) ☒ Claim(s) 6,8-19,21 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The receipt of the amendment dated December 20, 2007 of the application 10/551,398, including amendments to the claims and cancellation of claims 2 and 27, is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 3 and 4, "the input ... elements" is indefinite because it lacks antecedent basis. The input element was originally claimed in claim 2, which was cancelled. For the purpose of this action, "input element" will be assumed to be referring to the input drive of claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4, 5, 7, 20, and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Moskob, U. S. Patent 6,453,772.

Moskob discloses an apparatus for providing a rotational output. The apparatus includes a rotatable output element 15 (column 3, lines 21-24), a transfer element 10 providing a traversable circuit (provided with teeth 11) relative to the rotatable output element 15, a constraint, housing part 6 with fixed pegs 18 and 19, arranged to constrain the transfer element 10 against rotation about its own axis but to allow eccentric oscillation of the transfer element 10 (column 3, lines 13-17 and 43-60), and an input drive 3/4 (column 2, lines 65-67). The input drive 3/4 is rotatable and is arranged to cause oscillation of the transfer element 10 by traversal thereof, relative to the rotatable output element 15, to provide a rotatable output (column 3, lines 36-52).

(claim 1)

The transfer element 10 has a traversable inner circuit and the input and output elements 8 and 15 traverse the circuit.

(claim 4)

The apparatus includes a plurality of input elements 4, 3, and 8.

(claim 5)

The input drive includes a varying electromagnetic field drive.

(claim 7)

Since the constraint 6 is an elastic body that recovers its original shape when released after being distorted, constraint 6 is a spring.

(claim 20)

The apparatus provides a less than unity ratio between input and output rotational speed (column 3, lines 50-53).
(claim 24)

A drive, such as for a vehicle power window or sunroof (column 1, lines 12-13), is disclosed as comprising the apparatus for providing rotational output.
(claim 25)

Moskob discloses a method of providing a rotation output comprising causing traversal of a rotatable output element 15 relative to a traversable circuit of a transfer element 10 in which the transfer element 10 is constrained against rotation about its own axis but can oscillate eccentrically, in which an input drive 3/4 causes oscillation of the transfer element 10 and hence traversal relative to the rotatable output element 15 to provide a rotational output (column 3, lines 36-53)
(claim 26)

6. Claims 1, 3, 5, 7, 22, and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Colgan, U. S. Patent 3,424,036.

Colgan discloses an apparatus for providing a rotational output. The apparatus includes a rotatable output element 20 (including ring gear 36, column 2, line 59 and column 3, lines 29-33), a transfer element 30 providing a traversable circuit relative to the rotational output element 20, a constraint, housing part 12A with fixed pins 32, arranged to constrain the transfer element 30 against rotation about its own axis but to allow eccentric oscillation of the transfer element 30 (column 3, lines 12-20), and an input drive 14 (column 2, line 59). The input drive 14 is rotatable and is arranged to cause oscillation of the transfer element 30, by traversal thereof, relative to the rotatable output element 20, to provide a rotatable output (column 3, lines 34-55).
(claim 1)

The transfer element 30 has an inner traversable circuit for traversal by the input element 14 and an outer traversable circuit for traversal by the output element 20 (portion 36).
(claim 3)

The apparatus includes a plurality of input elements 14, 24.
(claim 5)

The input drive includes a varying electromagnetic field drive or piezoelectric drive or fluid impulse drive (column 2, line 71 to column 3, line 2).
(claim 7)

The transfer element 30 is traversable throughout an inner circumference of a rotational output element 36.
(claim 22)

The device provides a less than unity ratio between the input and output rotational speed.
(claim 24)

A transmission comprises the apparatus for providing rotational output.
(claim 25)

Colgan discloses a method of providing a rotational output comprising causing traversal of a rotatable output element 20 relative to a traversable circuit of a transfer element 30 in which the transfer element 30 is constrained against rotation about its own axis but can oscillate eccentrically, in which an input drive 14 causes oscillation of the transfer element 30 and hence traversal relative to the rotatable output element 20 to provide a rotational output (column 3, lines 34-55)
(claim 26)

Allowable Subject Matter

7. Claims 6, 8-19, 21, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Remarks

8. Applicant's arguments filed December 20, 2007 have been fully considered but they are not persuasive. The applicant states that since in each of the references, Moskob and Colgan, every point on an inner circumference of the transfer element is in contact with the input element, and the input element thus rotates within the transfer element, the input element cannot be said to traverse the transfer element. While the examiner agrees that the input element rotates within the transfer element, with every point on the surface of the input element in contact with the transfer element (and vice versa), it is not agreed that this cannot be called traversal. Since there is movement of the input element relative to the transfer element, each point on the input element moves along, or traverses, the transfer element. It is also noted that claim 26 does not require the input element to traverse the transfer element. Claim 26 requires "traversal of a rotatable output element relative to a traversable circuit of a transfer element" and "the input drive causes oscillation of the transfer element and hence traversal relative to the rotatable output element".

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents each disclose an apparatus having an input drive which rolls along a traversable circuit of a transfer element:

U. S. Patent 3,427,898 (Mayer) February 1969,

U. S. Patent 4,216,677 (Tuzson) August 1980,

U. S. Patent 4,703,670 (Kondo) November 1987 - embodiments with input rollers on the interior and exterior of the transfer element,

U. S. Patent 6,477,918 (Sakamoto) November 2002.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherry L. Estremesky whose telephone number is (571) 272-7090. The examiner can normally be reached on Monday and Thursday from 7:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sherry L. Estremsky/

Primary Examiner, Art Unit 3681

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